#### **Navy Advancement Center**

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# Advancement Handbook for Machinist's Mate (Weapons) (Submarine)

(For advancement exams designated as MMW)

#### **PREFACE**

The purpose of this Advancement Handbook is to help you prepare for Navywide Machinist's Mate (Weapons) (Submarine) advancement-in-rating examinations. It is divided into four major "parts" and one appendix. The four "parts" list the general skills areas on which you <u>may</u> be tested and the specific topics on which the test questions may be based. The appendix lists the publications from which the test questions may be drawn. By using the information in this handbook and the bibliography for the exam you will be taking, you can concentrate your studying on the areas that may be tested and can get the most out of your limited study time.

Keep in mind that the four "parts" are <u>cumulative</u>; that is, you are responsible for the skills assigned to the paygrade you are testing for, as well as the skills assigned to your present paygrade and all paygrades below. If you are tested on skills and knowledges from lower paygrades, it will be at the level of the paygrade for which you are testing. For example, if the topic is "torpedo tubes", an **MM3** candidate might be asked questions about **major components** of the torpedo tube system, an **MM2** candidate might be asked about the **operation** of the torpedo tubes and **detailed description** of torpedo tube components, an **MM1** candidate might be asked about **normal and emergency** tube operation as well as **testing procedures**, and an **MMC** candidate might be asked about **testing and troubleshooting procedures**.

As you prepare for the exam, remember that the exam is designed to test your knowledge of your profession. You gain professional knowledge by doing your job, completing your <u>qualifications cards</u>, and <u>studying the references associated with your rating</u>. The best way you can prepare for an advancement exam is to:

- 1. Learn as much as you can about your job. <u>Complete as many of your qualification cards as you can.</u> Know as much about the construction and operation of your equipment as you can. Continually ask questions. Find out not only what happens, but why it happens and what to do if it doesn't happen as expected. Make this a continuing process.
- 2. As soon as the bibliography for the exam you plan to take is available, get a copy and start reviewing the references listed on it. Don't try to memorize the information the references contain. Use that information to "sharpen" the knowledge and skills you already have.

Finally, remember that advancement competition is keen, so your keys to advancement include not only comprehensive advancement examination study but also sustained superior performance.

Prepared by

Naval Education and Training Professional Development and Technology Center

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GENERAL SKILLS AREA	EXAM EXPECTATIONS
<b>Mechanical Systems Operation</b>	
Operate ordnance launching support equipment and related systems	<ul> <li>Equipment operating parameters (air reducers, accumulators, sea chest blow, etc)</li> <li>Equipment construction and operating procedures</li> <li>Equipment component terminology</li> <li>Fluid power theory</li> </ul>
Perform routine maintenance on ordnance launching support equipment	Ordnance launching support equipment preventive and corrective maintenance procedures
Demonstrate an understanding of the skills and knowledges prescribed by the Anchor Operator Qualification Card	Anchor windlass description and operation
Perform log keeping on operating equipment and systems	Equipment operating parameters recording procedures
Mechanical Maintenance	
Perform routine maintenance on launching support systems	<ul> <li>Valve cleaning, inspecting, and repairing procedures</li> <li>Lubrication procedures</li> <li>3-M worker procedures</li> </ul>
Demonstrate proper tool use	Tool use and safety precautions
Perform tagout procedures	Tagout procedures

GENERAL SKILLS AREA	EXAM EXPECTATIONS
<b>Quality Assurance</b>	
<ul> <li>Document work on QA forms</li> <li>Observe QA procedures and QA forms requirements</li> <li>Demonstrate an understanding of the skills and knowledges prescribed on the Quality Assurance Inspector Qualification Card</li> </ul>	<ul><li>QA forms</li><li>QA procedures</li></ul>
Technical Administration	
Update and install changes to technical publications	Technical publications maintenance
State the purpose and describe the use of procedural documentation	Procedural documentation (PG, OP, CL, CP)
Use ship's drawings and drawing index	Ship's drawing index
Draw basic system diagrams	System symbols used in drawings
Update divisional logs and records	Log and records keeping
Demonstrate an understanding of security requirements	Security (admin & physical)
Prepare Trident command and control problem reports	Trident command and control problem reporting
Prepare torpedo maintenance data forms (TMIS, TMDER, etc.)	Torpedo maintenance data forms

GENERAL SKILLS AREA	EXAM EXPECTATIONS
Material Casualty/Damage Control	
Perform basic engineering casualty control exercises	Basic casualty control terminology     Basic casualty control procedures .
Perform torpedo/missile casualty procedures	Torpedo/missile emergency procedures
Perform torpedo/missile fuel cleanup procedures	• Fuel cleanup procedures (Otto Fuel II, T-H Dimmer, and JP-5/JP-10)
Maintain fuel spill kits	• Fuel spill kit maintenance (Otto Fuel II, T-H Dimmer, and JP-5/JP- 10)
Use ship's damage control equipment	Ship's damage control equipment procedures
Ordnance/Component Maintenance/ Operations	
Demonstrate an understanding of the skills and knowledges prescribed by the Torpedo Room Watch Qualification Card	Torpedo/missile operation and description
Demonstrate and understanding of the physical security requirements for all ship ordnance	Ordnance physical security
Perform physical security equipment maintenance	Physical security equipment

GENERAL SKILLS AREA	EXAM EXPECTATIONS
Perform basic preventive and corrective maintenance on torpedoes	Torpedo fresh water wash down, bearing plate replacement, torpedo wire splice, etc.
Perform basic missile preventive and corrective maintenance	Missile pressurization checks, electrical cable replacement, etc.
Small Arms Maintenance	
<ul> <li>Demonstrate an understanding of the skills and knowledges prescribed by the Small Arms Maintenance Individual Qualification Card</li> <li>Perform small arms maintenance</li> </ul>	Small arms maintenance
Inspect and use the line throwing rifle adapter	Line throwing rifle adapter use
Torpedo Tube/Signal Ejector System Maintenance/ Operations	
Demonstrate an understanding of the skills and knowledges prescribed by the Torpedo Room Watch Qualification Card	<ul> <li>Equipment operating instructions and procedures</li> <li>Theory of equipment operation</li> <li>Equipment construction</li> <li>Equipment component terminology</li> </ul>
Demonstrate an understanding of the skills and knowledges prescribed by the 3- Inch Launcher/Signal Ejector Operator Qualification Card	<ul> <li>Equipment operating instructions and procedures</li> <li>Theory of equipment operation</li> <li>Equipment construction</li> <li>Equipment component terminology</li> </ul>

GENERAL SKILLS AREA	EXAM EXPECTATIONS
Demonstrate an understanding of the skills and kowledges prescribed by the Pyrotechnic Handler Individual Qualification Card	<ul> <li>Equipment operating instructions and procedures</li> <li>Theory of equipment operation</li> <li>Equipment construction</li> <li>Equipment component terminology</li> </ul>
Vertical Launch System Maintenance	
Demonstrate an understanding of the skills and knowledges prescribed by the Vertical Launch System Operator Qualification Card	<ul> <li>Equipment operating instructions and procedures</li> <li>Theory of equipment operation</li> <li>Equipment construction</li> <li>Equipment component terminology</li> </ul>
Demonstrate and understanding of the skills and knowledges prescribed by the Vertical Launch System Handling Team Member Qualification Card	<ul> <li>Equipment operating instructions and procedures</li> <li>Theory of equipment operation</li> <li>Equipment construction</li> <li>Equipment component terminology</li> </ul>
Test Equipment Maintenance/ Operations	
<ul> <li>Clean, inspect, and test Otto Fuel II detectors</li> <li>Operate Otto Fuel II detectors</li> </ul>	<ul><li>Test equipment maintenance</li><li>Otto Fuel II detector operation</li></ul>
Demonstrate a basic understanding of how to operate the AURES and Mk 75 simulators	AURES and Mk 75 simulator operation
Operate TOMAHAWK missile test equipment	<ul> <li>Test set and equipment operation</li> <li>Test equipment maintenance</li> </ul>
Operate the Vertical Launch System calibration test set	<ul><li>Test set and equipment operation</li><li>Test equipment maintenance</li></ul>

GENERAL SKILLS AREA	EXAM EXPECTATIONS
Weapons Handling/Equipment Maintenance Operations	
Demonstrate an understanding of the skills and knowledges prescribed by the Ammunition Handler Individual Qualification Card	<ul> <li>Ammunition handling requirements</li> <li>General safety rules and associated hazards with all ordnance</li> </ul>
Demonstrate an understanding of the skills and knowledges prescribed by the Pyrotechnic Handler Individual Qualification Card	<ul> <li>Pyrotechnics handling requirements</li> <li>Pyrotechnics physical characteristics</li> <li>General safety rules and associated hazards with all ordnance</li> </ul>
Demonstrate and understanding of the skills and knowledges prescribed by the Weapons Handling Team Member Qualification Card	<ul> <li>Tube load/unload of weapons</li> <li>Receipt inspections of ordnance</li> <li>General safety rules and associated hazards with all ordnance</li> <li>Equipment component terminology</li> </ul>
<ul> <li>Perform maintenance on weapons handling equipment</li> <li>Conduct prior-to-use inspection on installed handling system and interlocks</li> </ul>	Weapons handling inspection and maintenance
Determine currency of weapons handling weight tests	Weight test currency requirements
Use and care of torque wrenches	Torque wrench care and use

GENERAL SKILLS AREA	EXAM EXPECTATIONS
Magazine Maintenance/ Operations	
Demonstrate an understanding of the magazine-associated skills and knowledges prescribed by the Ammunition Handler Individual Qualification Card	Magazine inspection procedures
Demonstrate an understanding of the magazine-associated skills and knowledges prescribed by the Pyrotechnic Handler Individual Qualification Card	<ul> <li>Magazine flooding system operation</li> <li>Magazine inspection procedures</li> </ul>
Electrical/Electronic Maintenance	
Identify the procedures and safety requirements associated with using the multimeter and megger	<ul> <li>Multimeter and megger theory and use</li> <li>Safety precautions</li> </ul>

#### Part 2

GENERAL SKILLS AREA	EXAM EXPECTATIONS
<b>Mechanical Systems Operation</b>	
<ul> <li>Inspect and repair ordnance launching support equipment and related systems</li> <li>Adjust ordnance launching support equipment</li> </ul>	<ul> <li>Ordnance launching support equipment construction</li> <li>Ordnance launching support equipment preventive and corrective maintenance procedures</li> </ul>
Perform anchor operations and maintenance	<ul><li>System construction</li><li>System operation</li><li>System preventive maintenance</li></ul>
Mechanical Maintenance	
<ul> <li>Troubleshoot launching support equipment and related systems</li> <li>Perform/supervise routine and corrective maintenance on launching support systems</li> </ul>	<ul> <li>Troubleshooting procedures</li> <li>Valve inspections and repairing procedures</li> </ul>
Verify ship's grease system plan	Lubrication procedures
Perform tagout audits	Tagout procedures
<b>Quality Assurance</b>	
Prepare QA forms	QA forms contents and preparation procedures
Prepare control work packages	Control work package contents and preparation procedures
Prepare formal work packages	Formal work package contents and preparation procedures

GENERAL SKILLS AREA	EXAM EXPECTATIONS
Submit Departure from Specifications forms	Departure from Specifications forms contents and preparation procedures
Conduct acceptance inspections on controlled material	Acceptance inspection requirements and procedures
Technical Administration	
Maintain technical publications	Technical publications maintenance
Demonstrate the proper use of procedural documentation	Procedural documentation (PG, OP, CL, CP) use requirements
Prepare 3-M maintenance forms	3-M maintenance forms (deferred and completed 2-Kilos, 2-Limas, etc.) requirements and completion procedures
Perform work center safety inspections/surveys	Safety inspections/surveys procedures
Maintain divisional logs/records	<ul> <li>Log and records keeping</li> <li>Weight test records</li> <li>Calibration records</li> <li>Divisional work logs</li> <li>Training records</li> </ul>
Complete and submit daily magazine/small arms reports	<ul> <li>Shipboard ammunition administration (ATRs, small arms reports, etc.)</li> <li>Ammunition Arms &amp; Explosives (AA&amp;E) security requirements</li> </ul>

GENERAL SKILLS AREA	EXAM EXPECTATIONS
Maintain and update ammunition lot/location cards	Magazine records
Verify the accuracy of system diagrams and drawings	Procedures for verifying the accuracy of system diagrams and drawings
Prepare and submit supply requisitions	Supply requisition procedures
Material Casualty/Damage Control	
Perform detailed engineering casualty control procedures	<ul> <li>Basic engineering casualty control procedures (hydraulic, high-pressure air leak, etc.)</li> <li>Ship's damage control procedures</li> </ul>
Perform detailed torpedo/missile casualty procedures	Torpedo/missile emergency procedures
Perform detailed fuel clean up procedures	Otto Fuel II, T-H Dimmer, and JP- 5/JP-10 fuel clean up procedures
Ordnance/Component Maintenance/ Operation	
Perform the tasks prescribed by the Torpedo Room Watch Qualification Card	Ordnance operations
<ul> <li>Perform torpedo/missile component inspections</li> <li>Perform/supervise preventive and corrective maintenance on torpedoes</li> <li>Perform/supervise preventive and corrective maintenance on missiles</li> </ul>	Torpedo/missile maintenance (missile pressurization checks, electrical cable replacement, etc.)

GENERAL SKILLS AREA	EXAM EXPERTATIONS
Small Arms Maintenance	
Perform tasks as prescribed by the Small Arms Maintenance Individual Qualification Card	Small arms maintenance
Coordinate qualification firings for security forces	Small arms qualification procedures
Torpedo Tube/Signal Ejector System Maintenance/ Operations	
Perform tasks prescribed by the Torpedo Room Watch Qualification Card	Torpedo system operations (startup; normal, manual and emergency operations; etc.)
Perform tasks prescribed by the 3-Inch Launcher/Signal Ejector Operator Qualification Card	3-Inch Launcher/Signal Ejector system operations (startup; normal, manual and emergency operations; etc.)
Perform tasks as prescribed by the Pyrotechnic Handler Individual Qualification Card	Equipment casualty procedures
Vertical Launch System Maintenance	
<ul> <li>Perform tasks prescribed by the Vertical Launch System Operator Qualification Card</li> <li>Demonstrate an understanding of the skills and knowledges prescribed by the Vertical Launch Handling Individual/ Team Leader Qualification Card</li> </ul>	<ul> <li>Equipment operation and maintenance</li> <li>Equipment casualty procedures</li> </ul>

GENERAL SKILLS AREA	EXAM EXPECTATIONS
Demonstrate an understanding of the skills and knowledges prescribed by the Vertical Launch Handling Individual/ Team Leader Qualification Card	VLS weapon handling requirements
Test Equipment Maintenance/ Operations	
Perform Otto Fuel II detector maintenance	Otto Fuel II detector preventive maintenance procedures
Discuss the AURES and Mk 75 simulator characteristics and operation	<ul> <li>AURES simulator characteristics and operation</li> <li>Mk 75 simulator characteristics and operation</li> </ul>
Operate TOMAHAWK missile test equipment	TOMAHAWK missile pressurization test set operation
Operate vertical launch system calibration test set	VLS calibration test set operating procedures
Weapons Handling/Equipment Maintenance Operations	
Perform tasks prescribed by the Ammunition Handler Individual Qualification Card	<ul> <li>Ammunition inventory procedures</li> <li>Ammunition inspections</li> <li>Ammunition handling procedures</li> <li>General safety rules and ordnance-associated hazards</li> </ul>
Perform tasks prescribed by the Pyrotechnic Handler Individual Qualification Card	<ul> <li>Pyrotechnics inventory procedures</li> <li>Pyrotechnics inspections</li> <li>Pyrotechnics handling procedures</li> <li>General safety rules and ordnance-associated hazards</li> </ul>

GENERAL SKILLS AREA	EXAM EXPECTATIONS
Perform tasks prescribed by the Weapons Handling Individual Qualification Card	<ul> <li>Tube load/unload of weapons</li> <li>Ordnance receipt inspections</li> <li>Weapons handling procedures</li> <li>General safety rules and ordnance-associated hazards</li> </ul>
<ul> <li>Perform maintenance on weapons handling equipment</li> <li>Conduct prior-to-use inspection on installed handling system and interlocks</li> </ul>	Weapons handling inspection and maintenance
Verify weapons handling weight test periodicity	Weight test log requirements and use
Magazine Maintenance/Operations	
Perform the tasks prescribed by the Ammunition Handler Individual Qualification Card	<ul><li> Equipment maintenance</li><li> Magazine inspection procedures</li></ul>
Perform the tasks prescribed by the Pyrotechnic Handler Individual Qualification Card	<ul><li> Equipment maintenance</li><li> Magazine inspection procedures</li></ul>
Electrical/Electronic Maintenance	
<ul> <li>Conduct point-to-point voltage and current measurements</li> <li>Perform resistance and continuity measurements</li> </ul>	<ul> <li>Multimeter theory and operation</li> <li>Megger theory and operation</li> </ul>

#### Part 3

GENERAL SKILLS AREA	EXAM EXPECTATIONS	
Mechanical System Operation		
Troubleshoot and test launching support equipment and related systems	<ul> <li>Troubleshooting procedures</li> <li>Launching support equipment/ system operating characteristics</li> <li>Launching support system operations</li> </ul>	
Inspect and test anchor components	Inspection and testing requirements	
Mechanical Maintenance		
Inspect and troubleshoot launching support equipment and related systems	<ul> <li>System preventive maintenance requirements</li> <li>System corrective maintenance requirements</li> </ul>	
Coordinate tagout audits	<ul><li>Tagout procedures</li><li>Tagout audit requirements and procedures</li></ul>	
<b>Quality Assurance</b>		
Review QA reports	QA inspection requirements and reporting procedures	
Review control work packages	Control work package contents and preparation procedures	
Review formal work packages	Formal work package contents and preparation procedures	
Review Departures from Specifications forms	Departure from Specifications forms contents and preparation procedures	

GENERAL SKILLS AREA	EXAM EXPECTATIONS
Conduct QA material storage surveillance and schedules	Audit and surveillance procedures
<b>Technical Administration</b>	
Develop PMS cycle, quarterly, and weekly schedules	3-M requirements and scheduling procedures
<ul> <li>Prepare and maintain ATRs</li> <li>Review master stock record cards</li> </ul>	Ammunition administration
Perform explosive safety inspections	<ul> <li>Explosive safety inspection procedures</li> <li>Ordnance safety requirements</li> </ul>
Perform AA&E physical security surveys	Security requirements
Submit ordnance alteration (ORDALT) documentation	ORDALT documentation requirements
Develop and verify procedural documentation	<ul> <li>Procedural documentation requirements</li> <li>Local change requirements</li> </ul>
Develop divisional training schedules	Training schedule requirements

GENERAL SKILLS AREA	EXAM EXPECTATIONS
Maintain and review divisional records	<ul> <li>Weight test records</li> <li>Calibration records</li> <li>Magazine records</li> <li>Divisional work logs</li> <li>Training records</li> </ul>
Review supply requisitions	Supply procedures
Ordnance/Component Maintenance/Operations	
Supervise ordnance procedures and maintenance	<ul><li>Ordnance operations</li><li>Ordnance procedures</li></ul>
Material Casualty/Damage Control	
Supervise and perform emergency casualty control procedures	Emergency casualty control procedures
Supervise torpedo/missile casualty procedures	Torpedo/missile casualty procedures
Supervise fuel clean up procedures	Fuel clean up procedures
Small Arms Maintenance	
Monitor qualifications firing for security forces	Small arms qualifications
Torpedo Tube/Signal Ejector System Maintenance/ Operations	
<ul> <li>Supervise torpedo tube/signal ejector firing tests</li> <li>Troubleshoot and test torpedo tubes/signal ejector</li> </ul>	<ul> <li>Torpedo tube/signal ejector operations</li> <li>Torpedo tube/signal ejector maintenance</li> </ul>

GENERAL SKILLS AREA	EXAM EXPECTATIONS
Vertical Launch System Maintenance	
Troubleshoot and test vertical launch system	Vertical launch system maintenance/operations
Weapons Handling/ Equipment Maintenance Operations	
Supervise weapons handling evolutions	Weapons handling maintenance and operations
Perform non-nuclear explosive handling certification program administrative requirements	Non-nuclear explosive handling certification program administrative requirements

#### Part 4

GENERAL SKILLS	EXAM EXPECTATIONS	
Mechanical Maintenance		
Coordinate preventive and corrective maintenance on launching support equipment and related systems	• Launching support equipment 3-M procedures	
Test and troubleshoot launching support equipment and related systems	Lunching support equipment troubleshooting procedures/tables	
<b>Quality Assurance</b>		
<ul> <li>Review and approve control work packages</li> <li>Submit Departure From Specification forms</li> </ul>	• QA procedures	
Conduct acceptance inspections on controlled material	QA acceptance inspection procedures	
Coordinate and maintain QA material storage surveillance and schedules	QA surveillance and audits	
Technical Administration		
Review 3-M schedules	3-M procedures and requirements	
Review completed 3-M forms	3-M forms requirements for and contents	
Submit configuration change requests	Requirements for and contents of Configuration Change Requests	

GENERAL SKILLS AREA	EXAM EXPECTATIONS
<ul> <li>Review ATRs</li> <li>Coordinate and review explosive safety inspections</li> <li>Coordinate and review AA&amp;E physical security surveys</li> </ul>	Ammunition administration
Review and approve divisional training plans	Training requirements
Review divisional logs/records	Logs and records requirements and contents
Prepare CASREPs	CASREP procedures
Material Casualty/Damage Control	
Create, schedule, and implement applicable drills	Material casualty control drills
Supervise damage control parties	Damage control procedures
Ordnance/Component Maintenance/Operations	
Coordinate ordnance operations and maintenance	Ordnance operations
Torpedo Tube/Signal Ejector System Maintenance/Operations	
Coordinate torpedo/signal ejector maintenance and operations	Launching equipment maintenance/operations

GENERAL SKILLS AREA	EXAM EXPECTATIONS
Vertical Launch System Maintenance	
Coordinate VLS maintenance and operations	VLS maintenance/operations
Weapons Handling/ Equipment Maintenance/ Operations	
Implement non-nuclear explosive handling and certification program	Non-nuclear explosives handling and certification program requirements and procedures
Coordinate weapons handling/equipment operations	Weapons handling/equipment operations

#### **Appendix 1**

#### **References Used in This Advancement Handbook**

The references are divided into five groups. The first group pertains to paygrades E-4 through E-7. The remaining four groups pertain to individual paygrades, as indicated on the lists.

Keep in mind that the ONLY publications you need to study in preparing for a specific exam are the publications listed on the exam specific-bibliography for that exam.

#### **MMW3 THROUGH MMWC**

Short Title	Long Title	Stocking Point
CINCLANT/PACFLT	Joint Fleet Maintenance Manual; Tests,	Note 1
4790.3 Vol IV	Inspections and Special Application	
	Maintenance Programs;	
	CINCLANT/PACFLT 4790.3 Vol IV	
CINCLANT/PACFLT	Joint Fleet Maintenance Manual; Quality	Note 1
4790.3 Vol V	Maintenance (formerly Quality Assurance);	
	CINCLANT/PACFLT 4790.3 Vol V	
SSORM (SSBN)	Standard Submarine Organization and	Note 2
	Regulations Manual (SSBN);	
	COMSUBLANT/PAC 5400.38	
SSORM (SSN)	Standard Submarine Organization and	Note 2
	Regulations Manual (SSN);	
	COMSUBLANT/PAC 5400.39	
COMSUBLANT/PAC	Standard Submarine Combat Systems	Note 2
5400.40	Department Organization and Regulations	
	Manual (SSN); COMSUBLANT/PAC	
	5400.40	
COMSUBLANT/PAC	Submarine Force Nuclear Weapons	Note 2
8120.2	Manual; COMSUBLANT/PAC 8120.2	
COMSUBLANT/PAC	Submarine Force Conventional Weapons	Note 2
8500.4	Manual; COMSUBLANT/PAC 8500.4	
MFG PUB KNC 3558-	King Neutronics 3558 Pressure-Vacuum	Note 5
39-1	Chamber; MFG PUB KNC 3558-39-1	
N0000-00-IDX-	Navy's Standard Technical Manual	Note 4
000/TMINS	Identification Numbering System (TMINS);	
	N0000-00-IDX-000/TMINS	

NAVAIR 17-35-MTL-	Metrology Requirements List; NAVAIR 17-35-MTL-1	Note 4
NAVEDTRA 173-01- 00-88	NEETS, Module 1 — Introduction to Matter, Energy, and Direct Current; NAVEDTRA 173-01-00-88	Note 4
NAVEDTRA 172-02- 00-91	NEETS, Module 2 – Introduction to Alternating Current and Transformers; NAVEDTRA 172-02-00-91	Note 4
NAVEDTRA 172-03- 00-93	NEETS, Module 3 — Circuit Protection, Control and Measurement; NAVEDTRA 172-02-00-91	Note 4
NAVEDTRA 172-16- 00-96	NEETS, Module 16 – Introduction to Test Equipment, NAVEDTRA 172-16-00-96	Note 4
NAVELEX EE730- HA-OMI-010	Radiac Set AN/PDR-73; NAVELEX EE730- HA-OMI-010	Note 4
NAVMEDCOMINST 6270.1	Health Hazards of OTTO Fuel II; NAVMEDCOMINST 6270.1	Note 4
NAVSEA 0948-LP- 012-5000	Standard Navy Valves; NAVSEA 0948-LP- 012-5000	Note 4
NAVSEA OD 3000	Ordnance Lubrication; NAVSEA OD 3000	Note 4
NAVSEA OD 44979, Vol 1	Firing Craft Operating Procedures and Checklists; Introduction and Description; NAVSEA OD 44979, Vol 1	Note 3
NAVSEA OD 44979, Vol 2; Pt 1,5,8,9,12 (AS APPLICABLE)	Firing Craft Operating Procedures and Check List for Weapon Loading and Handling Systems; NAVSEA OD 44979, Vol 2; Pt 1,5,8,9,12 (as applicable)	Note 3
NAVSEA OD 44979, Vol 2; Pt 14	Firing Craft Operating Procedures and Check List for 3-Inch Launcher; NAVSEA OD 44979, Vol 2; Pt 14	Note 3
NAVSEA OD 44979, Vol 4	Firing Craft Operating Procedures for Weapons Emergencies; NAVSEA OD 44979; Vol 4	Note 3
NAVSEA OD 44979, Vol 7	Firing Craft Operating Procedures for Torpedo MK 48; NAVSEA OD 44979; Vol 7	Note 3
NAVSEA OD 44979, Vol 11	Firing Craft Operating Procedures for Underwater Mine Mk 60 (CAPTOR); NAVSEA OD 44979; Vol 11	Note 3
NAVSEA OD 44979, Vol 12	Firing Craft Operating Procedures for Underwater Mine Mk 67 (SLMM); NAVSEA OD 44979; Vol 12	Note 3
NAVSEA OD 44979, Vol 14; Pt 1,2,14 (as applicable)	Firing Craft Operating Procedures for TOMAHAWK Missile UGM-109; NAVSEA OD 44979, Vol 14; Pt 1,2,14 (as applicable)	Note 3

NAVSEA OD 44979,	Firing Craft Operating Procedures for	Note 3
Vol 15	Advanced Capability (ADCAP) Torpedo Mk 48; NAVSEA OD 44979; Vol 15	
NAVSEA OD 44979, Vol 17	Firing Craft Operating Procedures for Weapon Monitoring Equipment; NAVSEA OD 44979; Vol 17	Note 3
NAVSEA OP 3347	United States Navy Ordnance Safety Precautions; NAVSEA OP 3347	Note 4
NAVSEA OP 3565 Vol 1	Electromagnetic Radiation Hazards, Hazards to Personnel, Fuel and Other Flammable Material, Vol 1; NAVSEA OP 3565; Vol 1	Note 4
NAVSEA OP 3565 Vol 2	Electromagnetic Radiation Hazards, Hazards to Ordnance, Vol 2; NAVSEA OP 3565; Vol 2	Note 4
NAVSEA OP 4	AMMUNITION AFLOAT; NAVSEA OP 4	Note 4
NAVSEA OP 4020	Torpedo Mk 48, All Mods; NAVSEA OP 4020	Note 3
NAVSEA OP 4023	Torpedo Mk 48, All Mods; NAVSEA OP 4023	Note 3
NAVSEA OP 4443	Torpedo Mounted Dispenser Mk 10 Mod 0; NAVSEA OP 4443	Note 4
NAVSEA S005-AA- GYD-030	Guide for User Maintenance of NAVSEA Technical Manuals (TMMP); NAVSEA S005-AA-GYD-030	Note 4
NAVSEA S0752-AA- GYD-010	Ship Configuration and Logistic Support Information System (SCLSIS); NAVSEA S0752-AA-GYD-010	Note 4
NAVSEA S6340-AA- MMA-010	OTTO Fuel II Safety, Storage, and Handling Instructions; NAVSEA S6340- AA-MMA-010	Note 4
NAVSEA S6340-AF- MMO-010	OTTO Fuel Detector Mk 15 Mod O; NAVSEA S6340-AF-MMO-010	Note 4
NAVSEA S6430-AE- TED-010	Technical Directive for Piping Devices, Flexible Hose Assemblies, Vol 1; NAVSEA S6430-AE-TED-010	Note 4
NAVSEA S6430-AE- TED-020	Technical Directive for Piping Devices, Flexible Hose Assemblies, Vol 2; NAVSEA S6430-AE-TED-020	Note 4
NAVSEA S9086-VD- STM-010	Preservation of Ships in Service-General, NSTM, Vol 1; NAVSEA S9086-VD-STM- 010	Note 4

NAVSEA S9086-VD	Preservation of Ships in Service-Surface	Note 4
STM-020	Preparation and Painting, NSTM, Vol 2;	
	NAVSEA S9086-VD STM-020	
NAVSEA S9086-CH-	Gas-Free Engineering, NSTM, Vol 3,	Note 4
STM-030	Chapter 074; NAVSEA S9086-CH-STM-030	
NAVSEA S9086-CJ-	Fasteners, NSTM, Chapter 075; NAVSEA	Note 4
STM-010	S9086-CJ-STM-010	
NAVSEA S9086-CL-	Personnel Protection Equipment, NSTM,	Note 4
STM-030	Chapter 077; NAVSEA S9086-CL-STM-030	
NAVSEA S9086-CM-	Seals, NSTM, Chapter 078; NAVSEA	Note 4
STM-010	S9086-CM-STM-010	
NAVSEA S9086-H7-	Lubricating Oils, Greases, and Hydraulic	Note 4
STM-010	Fluids and Lubrication Systems, NSTM,	
	Chapter 262; NAVSEA S9086-H7-STM-010	
NAVSEA S9086-RJ-	Pressure, Temperature and Other	Note 4
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NAVSEA S9086-RK-	Piping Systems, NSTM, Chapter 505;	Note 4
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NAVSEA S9086-UU-	Wire and Fiber Rope Rigging, NSTM,	Note 4
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311/1-030	Ship/Submarine Applications, NSTM,	
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NAVSEA S9SSB-X9- SSM-BF0	SSBN726 SSM 3-Inch Device Delivery System, Vol 2 Pt 3, Ch 10; NAVSEA S9SSB-X9-SSM-BF0	Note 4
NAVSEA S9SSN-W4- SSM-BN0	SSN688 SSM Weapons Delivery System, Vol 2, Pt 8; NAVSEA S9SSN-W4-SSM-BN0	Note 8
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NAVSEA SG420-AN- MMA-010	Defensive Weapons Delivery System Equipment Manual Vol 1, General Information, Techniques and Criteria, and Scheduled Maintenance; NAVSEA SG420- AN-MMA-010	Note 4
NAVSEA SG420-AN- MMA-020	Defensive Weapons Delivery System Equipment Manual Vol II, Troubleshooting, Maintenance, Repair, and Overhaul, Books 1 and 2; NAVSEA SG420-AN-MMA-020	Note 4
NAVSEA SG420-BU- MMA-010	SSN688 Class Weapons Delivery System Equipment Manual Vol I; NAVSEA SG420- BU-MMA-010	Note 6
NAVSEA SG420-BU- MMA-020	SSN688 Class Weapons Delivery System Equipment Manual Vol II Troubleshooting; NAVSEA SG420-BU-MMA-020	Note 6
NAVSEA SG420-BU- MMA-050	SSN688 Class Weapons Delivery System Equipment Manual Vol V Vertical Launch System; NAVSEA SG420-BU-MMA-050	Note 6

NAVSEA SW010-AB- GTP-010	United States Navy Ammunition Historical Data; NAVSEA SW010-AB-GTP-010	Note 4
NAVSEA SW010-AF- ORD-010	Identification of Ammunition; NAVSEA SW010-AF-ORD-010	Note 4
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NAVSEA SW350-A1- MMO-010	Description, Operation, and Maintenance Mk 87 Mod 1 Line Throwing Rifle Adapter Kit; NAVSEA SW350-A1-MMO-010	Note 4
NAVSEA SW395-AA- IFM-010	Submarine Torpedo Tubes and Weapon Handling Systems Interface Manual Description; NAVSEA SW395-AA-IFM-010	Note 4
NAVSEA SW395-AA- IFM-020	Submarine Torpedo Tubes and Weapon Handling Systems Interface Manual Drawings; NAVSEA SW395-AA-IFM-020	Note 3
NAVSEA SW395-AA- IFM-040	Submarine Weapon Handling , Stowage, and Torpedo Tube Launch Interface Manual; NAVSEA SW395-AA-IFM-040	Note 3
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NAVSEA SW513-EO- MMA-010	Torpedo Mk 48 ADCAP Weapon System and In-Service Support Equipment and Description; NAVSEA SW513-EO-MMA- 010	Note 3
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OPNAVINST 3100.6	Special Incident Reporting (OPREP 3); OPNAVINST 3100.6	Note 7
SORM	Standard Organization and Regulations Manual of the U.S. Navy; OPNAVINST 3120.32	Note 7
OPNAVINST 4441.170	COSAL Maintenance and Use; OPNAVINST 4441.170	Note 7
3-M Manual	Ships' Maintenance Material Management (3-M) Manual; OPNAVINST 4790.4	Note 7
OPNAVINST 5090.1	Environment and Natural Resources Program Manual; OPNAVINST 5090.1	Note 7
OPNAVINST 5100.19	Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat; OPNAVINST 5100.19	Note 7
OPNAVINST 5100.20	Shipboard Heat Stress Control and Personnel Protection; OPNAVINST 5100.20	Note 7
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OPNAVINST 5510.1	Department of the Navy Information and Personnel Security Program; OPNAVINST 5510.1	Note 7
OPNAVINST 5510.162	Nuclear Weapon Personnel Reliability Program (PRP); OPNAVINST 5510.162	Note 7
OPNAVINST 5530.13	Department of the Navy Physical Security Instruction for Conventional Arms, Ammunition, and Explosives (AA&E); OPNAVINST 5530.13	Note 7
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SPCCINST 8010.12	Supply Management of Ammunition;	Note 10
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TM 9-1005-249-10	Operator's Manual for Rifle, 5.56-MM, M16;	Note 11
	TM 9-1005-249-10	

#### MMW3

Short Title	Long Title	Stocking Point
NAVEDTRA 12001	Fireman; NAVEDTRA 12001	Note 4
NAVEDTRA 12014	Blueprint Reading and Sketching; NAVEDTRA 12014	Note 4
NAVEDTRA 12043	Military Requirements, Basic (BMR); NAVEDTRA 12043	Note 4
NAVEDTRA 12044	Military Requirements for Petty Officer Third Class; NAVEDTRA 12044	Note 4
NAVEDTRA 12085	Use and Care of Hand Tools and Measuring Tools; NAVEDTRA 12085	Note 4
NAVEDTRA 12199	Basic Machines; NAVEDTRA 12199	Note 4
NAVEDTRA 12443	Gunner's Mate; NAVEDTRA 12443 (Chaps 1, 2, and 3)	Note 4
NAVEDTRA 12650	Storekeeper 3 & 2; NAVEDTRA 12650	Note 4

NAVEDTRA 12694	Fluid Power; NAVEDTRA 12694	Note 4
SORM	Standard Organization and Regulations	Note 7
	Manual of the U.S. Navy; (Chapter 6 only);	
	OPNAVINST 3120.32	

#### MMW2

Short Title	Long Title	Stocking Point
NAVEDTRA 12014	Blueprint Reading and Sketching; NAVEDTRA 12014	Note 4
NAVEDTRA 12043	Military Requirements, Basic (BMR); NAVEDTRA 12043	Note 4
NAVEDTRA 12045	Military Requirements for Petty Officer Second Class; NAVEDTRA 12045	Note 4
NAVEDTRA 12443	Gunner's Mate; NAVEDTRA 12443 (Chaps 1, 2, and 3)	Note 4
NAVEDTRA 12650	Storekeeper 3 & 2; NAVEDTRA 12650	Note 4

#### MMW1

Short Title	Long Title	Stocking
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COMSUBLANT/PAC	Joint Training Manual;	Note 2
C3500.1	COMSUBLANT/PAC C3500.1	
NAVEDTRA 12971	Naval Safety Supervisor; NAVEDTRA 12971	Note 4
OPNAVINST 3600.3	Policy for the Material and Tactical	Note 7
	Certification of Cruise Missile Capable	
	Surface Ships and Submarines;	
	OPNAVINST 3600.3	
OPNAVINST 4700.8	Trials, Acceptance, Commissioning, and	Note 7
	Fitting of U.S. Naval Ships Undergoing	
	Construction/Conversion/Modernization;	
	OPNAVINST 4700.8	

#### **MMWC**

Short Title	Long Title	Stocking Point
	Joint Fleet Maintenance Manual, New Construction; CINCLANT/PACFLT 4790.3 Vol I	Note 1

CINCLANT/PACFLT	Joint Fleet Maintenance Manual, Integrated	Note 1
4790.3 Vol II	Fleet Maintenance; CINCLANT/PACFLT	
	4790.3 Vol II	
CINCLANT/PACFLT	Joint Fleet Maintenance Manual Deployed	Note 1
4790.3 Vol III	Maintenance; CINCLANT/PACFLT 4790.3	
	Vol III	
NAVEDTRA 12047	Military Requirements for Chief Petty	Note 4
	Officer; NAVEDTRA 12047	

#### **NOTES**

Note 1 – INTERNET – http://www.submepp.navy.mil/PRODSERV.HTM

Note 2 – Ltr request to: Commander Submarine Fleet

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Norfolk VA 23551-2492

Note 3 – Ltr request to: Commander Naval Undersea Warfare Center

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Note 4 – To order: MILSTRIP TO NAVICP PHILA (Stk No. from NAVSUP P2002) or via INTERNET: http://www.nll.navsup.navy.mil

Note 5 – NWASTA CORONA, CA

Note 6 – Ltr request to: SUPSHIP

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Note 7 – INTERNET http://neds.nebt.daps.mil

Note 8 – Ltr request to: Electric Boat Corporation

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Eastern Point Road Groton CT. 06340 Attn: Department 403

Note 9 – NTIC Series B1 (CD-ROM) (See your command NWP custodian)

Note 10 – Ltr request to: Commanding Officer

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Note 11 – Ltr request to: U.S. Army Publications

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